- (i) APPLICANT: Ammons, William Steve et al.
- (ii) TITLE OF INVENTION: Method of Treating Conditions Associated with Intestinal Ischemia/Reperfusion
- (iii) NUMBER OF SEQUENCES: 2
- (iv) CORRESPONDENCE ADDRESS:(A) ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun(B) STREET: 6300 Sears Tower, 233 South Wacker Drive

  - (C) CITY: Chicago
  - (D) STATE: Illinois
  - (E) COUNTRY: United States of America (F) ZIP: 60606-6402

  - (v) COMPUTER READABLE FORM:
    - (A) MEDIUM TYPE: Floppy disk

    - (B) COMPUTER: IBM PC compatible (C) OPERATING SYSTEM: PC-DOS/MS-DOS
    - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: (B) FILING DATE:
- (C) CLASSIFICATION:
- (viii) ATTORNEY INFORMATION:

  - (A) NAME: Sharp, Jeffrey S.
    (B) REGISTRATION NUMBER: 31,879
  - (C) REFERENCE/DOCKET NUMBER: 27129/32043
  - (ix) TELECOMMUNICATION INFORMATION:
    - (A) TELEPHONE: 312/474-6300 (B) TELEFAX: 312/474-0448

    - (C) TELEX: 25-3856
- (2) INFORMATION FOR SEQ ID NO:1:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1813 base pairs
      (B) TYPE: nucleic acid

    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: cDNA
  - (ix) FEATURE:
    - (A) NAME/KEY: CDS
    - (B) LOCATION: 31..1491
  - (ix) FEATURE:
    - (A) NAME/KEY: mat\_peptide
      (B) LOCATION: 124..1491

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- (ix) FEATURE:
  (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "rBPI"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

CAGGCCTTGA GGTTTTGGCA GCTCTGGAGG ATG AGA GAG AAC ATG GCC AGG GGC Met Arg Glu Asn Met Ala Arg Gly -31 -30											5	4					
CCT Pro	TGC Cys	AAC Asn	GCG Ala -20	CCG Pro	AGA Arg	TGG Trp	GTG Val	TCC	CTG	ATG	GTG Val	CTC	GTC Val -10	GCC Ala	ATA	10	2
GGC Gly	ACC Thr	GCC Ala -5	GTG Val	ACA Thr	GCG Ala	GCC Ala	GTC Val 1	AAC Asn	CCT Pro	GGC Gly	GTC Val 5	GTG Val	GTC Val	AGG Arg	ATC Ile	15	0
TCC Ser 10	CAG Gln	AAG Lys	GGC Gly	CTG Leu	GAC Asp 15	TAC Tyr	GCC Ala	AGC Ser	CAG Gln	CAG Gln 20	GGG Gly	ACG Thr	GCC Ala	GCT Ala	CTG Leu 25	19	8
CAG Gln	AAG Lys	GAG Glu	CTG Leu	AAG Lys 30	AGG Arg	ATC Ile	AAG Lys	ATT Ile	CCT Pro 35	GAC Asp	TAC Tyr	TCA Ser	GAC Asp	AGC Ser 40	TTT Phe	24	6
AAG Lys	ATC Ile	AAG Lys	CAT His 45	CTT Leu	GGG Gly	AAG Lys	GGG Gly	CAT His 50	TAT Tyr	AGC Ser	TTC Phe	TAC Tyr	AGC Ser 55	ATG Met	GAC Asp	29	4
ATC Ile	CGT Arg	GAA Glu 60	TTC	CAG Gln	CTT Leu	CCC Pro	AGT Ser 65	TCC Ser	CAG Gln	ATA Ile	AGC Ser	ATG Met 70	GTG Val	CCC Pro	AAT Asn	34	2
GTG Val	GGC Gly 75	CTT Leu	AAG Lys	TTC Phe	TCC Ser	ATC Ile 80	AGC Ser	AAC Asn	GCC Ala	AAT Asn	ATC Ile 85	AAG Lys	ATC Ile	AGC Ser	GGG Gly	39	0
AAA Lys 90	TGG Trp	AAG Lys	GCA Ala	CAA Gln	AAG Lys 95	AGA Arg	TTC Phe	TTA Leu	AAA Lys	ATG Met 100	AGC Ser	GGC Gly	AAT Asn	TTT Phe	GAC Asp 105	43	8
CTG Leu	AGC Ser	ATA Ile	GAA Glu	GGC Gly 110	ATG Met	TCC Ser	ATT Ile	TCG Ser	GCT Ala 115	GAT Asp	CTG Leu	AAG Lys	CTG Leu	GGC Gly 120	AGT Ser	48	6
AAC Asn	CCC Pro	ACG Thr	TCA Ser 125	GGC Gly	AAG Lys	CCC Pro	ACC Thr	ATC Ile 130	ACC Thr	TGC Cys	TCC Ser	AGC Ser	TGC Cys 135	AGC Ser	AGC Ser	534	4
CAC His	ATC Ile	AAC Asn 140	AGT Ser	GTC Val	CAC His	GTG Val	CAC His 145	ATC Ile	TCA Ser	AAG Lys	AGC Ser	AAA Lys 150	GTC Val	GGG Gly	TGG Trp	582	2
CTG Leu	ATC Ile 155	CAA Gln	CTC Leu	TTC Phe	CAC His	AAA Lys 160	AAA Lys	ATT Ile	GAG Glu	TCT Ser	GCG Ala 165	CTT Leu	CGA Arg	AAC Asn	AAG Lys	630	0
ATG Met 170	AAC Asn	AGC Ser	CAG Gln	GTC Val	TGC Cys 175	GAG Glu	AAA Lys	GTG Val	ACC Thr	AAT Asn 180	TCT Ser	GTA Val	TCC Ser	TCC Ser	AAG Lys 185	678	8
CTG	CAA	CCT	TAT	TTC	CAG	ACT	CTG	CCA	GTA	ATG	ACC	AAA	ATA	GAT	TCT	. 720	6

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Leu	Gln	Pro	Tyr	Phe 190	Gln	Thr	Leu	Pro	Val 195	Met	Thr	Lys	Ile	Asp 200		
GTG Val	GCT Ala	GGA Gly	ATC Ile 205	AAC Asn	TAT Tyr	GGT Gly	CTG Leu	GTG Val 210	GCA Ala	CCT Pro	CCA Pro	GCA Ala	ACC Thr 215	ACG Thr	GCT Ala	774
GAG Glu	ACC Thr	CTG Leu 220	GAT Asp	GTA Val	CAG Gln	ATG Met	AAG Lys 225	GGG Gly	GAG Glu	TTT Phe	TAC Tyr	AGT Ser 230	GAG Glu	AAC Asn	CAC His	822
CAC His	AAT Asn 235	CCA Pro	CCT Pro	CCC Pro	TTT	GCT Ala 240	CCA Pro	CCA Pro	GTG Val	ATG Met	GAG Glu 245	TTT Phe	CCC	GCT Ala	GCC Ala	870
CAT His 250	GAC Asp	CGC Arg	ATG Met	GTA Val	TAC Tyr 255	CTG Leu	GGC Gly	CTC Leu	TCA Ser	GAC Asp 260	TAC	TTC Phe	TTC Phe	AAC Asn	ACA Thr 265	918
GCC Ala	GGG Gly	CTT Leu	GTA Val	TAC Tyr 270	CAA Gln	GAG Glu	GCT Ala	GGG Gly	GTC Val 275	TTG Leu	AAG Lys	ATG Met	ACC Thr	CTT Leu 280	AGA Arg	966
GAT Asp	GAC Asp	ATG Met	ATT Ile 285	CCA Pro	AAG Lys	GAG Glu	TCC Ser	AAA Lys 290	Phe	CGA Arg	CTG Leu	ACA Thr	ACC Thr 295	AAG Lys	TTC Phe	1014
TTT Phe	GGA Gly	ACC Thr 300	TTC Phe	CTA Leu	CCT Pro	GAG Glu	GTG Val 305	GCC Ala	AAG Lys	AAG Lys	TTT Phe	CCC Pro 310	AAC Asn	ATG Met	AAG Lys	1062
ATA Ile	CAG Gln 315	ATC Ile	CAT His	GTC Val	TCA Ser	GCC Ala 320	TCC Ser	ACC Thr	CCG Pro	CCA Pro	CAC His 325	CTG Leu	TCT Ser	GTG Val	CAG Gln	1110
CCC Pro 330	ACC Thr	GGC Gly	CTT Leu	ACC Thr	TTC Phe 335	TAC Tyr	CCT Pro	GCC Ala	GTG Val	GAT Asp 340	GTC Val	CAG Gln	GCC Ala	TTT Phe	GCC Ala 345	1158
GTC Val	CTC Leu	CCC Pro	AAC Asn	TCC Ser 350	TCC Ser	CTG Leu	GCT Ala	TCC Ser	CTC Leu 355	TTC Phe	CTG Leu	ATT Ile	GGC Gly	ATG Met 360	CAC His	1206
ACA Thr	ACT Thr	GGT Gly	TCC Ser 365	ATG Met	GAG Glu	GTC Val	AGC Ser	GCC Ala 370	GAG Glu	TCC Ser	AAC Asn	AGG Arg	CTT Leu 375	GTT Val	GGA Gly	1254
GAG Glu	CTC Leu	AAG Lys 380	CTG Leu	GAT Asp	AGG Arg	CTG Leu	CTC Leu 385	CTG Leu	GAA Glu	CTG Leu	AAG Lys	CAC His 390	TCA Ser	AAT Asn	ATT Ile	1302
GGC Gly	CCC Pro 395	TTC Phe	CCG Pro	GTT Val	GAA Glu	TTG Leu 400	CTG Leu	CAG Gln	GAT Asp	ATC Ile	ATG Met 405	AAC Asn	TAC Tyr	ATT Ile	GTA Val	1350
CCC Pro 410	ATT Ile	CTT Leu	GTG Val	CTG Leu	CCC Pro 415	AGG Arg	GTT Val	AAC Asn	GAG Glu	AAA Lys 420	CTA Leu	CAG Gln	AAA Lys	GGC Gly	TTC Phe 425	1398
CCT Pro	CTC Leu	CCG Pro	ACG Thr	CCG Pro 430	GCC Ala	AGA Arg	GTC Val	CAG Gln	CTC Leu 435	TAC Tyr	AAC Asn	GTA Val	GTG Val	CTT Leu 440	CAG Gln	1446
CCT Pro	CAC His	CAG Gln	AAC Asn	TTC Phe	CTG Leu	CTG Leu	TTC Phe	GGT Gly	GCA Ala	GAC Asp	GTT Val	GTC Val	TAT Tyr	AAA Lys		1491

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TGAAGGCACC	AGGGGTGCCG	GGGGCTGTCA	GCCGCACCTG	TTCCTGATGG	GCTGTGGGGC	1551
ACCGGCTGCC	TITCCCCAGG	GAATCCTCTC	CAGATCTTAA	CCAAGAGCCC	CTTGCAAACT	1611
TCTTCGACTC	AGATTCAGAA	ATGATCTAAA	CACGAGGAAA	CATTATTCAT	TGGAAAAGTG	1671
CATGGTGTGT	ATTTTAGGGA	TTATGAGCTT	CTTTCAAGGG	CTAAGGCTGC	AGAGATATTT	1731
CCTCCAGGAA	TCGTGTTTCA	ATTGTAACCA	AGAAATTTCC	ATTTGTGCTT	CATGAAAAA	1791
AACTTCTGGT	TTTTTTCATG	TG		•		1813

## (2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 487 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Met Arg Glu Asn Met Ala Arg Gly Pro Cys Asn Ala Pro Arg Trp Val -31 -30 -25 -20

Ser Leu Met Val Leu Val Ala Ile Gly Thr Ala Val Thr Ala Ala Val -15 -5 1

Asn Pro Gly Val Val Arg Ile Ser Gln Lys Gly Leu Asp Tyr Ala
5 10 15

Ser Gln Gln Gly Thr Ala Ala Leu Gln Lys Glu Leu Lys Arg Ile Lys 20 30

Ile Pro Asp Tyr Ser Asp Ser Phe Lys Ile Lys His Leu Gly Lys Gly 35 40 45

His Tyr Ser Phe Tyr Ser Met Asp Ile Arg Glu Phe Gln Leu Pro Ser 50 60 65

Ser Gln Ile Ser Met Val Pro Asn Val Gly Leu Lys Phe Ser Ile Ser 70 75 80

Asn Ala Asn Ile Lys Ile Ser Gly Lys Trp Lys Ala Gln Lys Arg Phe 85 90 95

Leu Lys Met Ser Gly Asn Phe Asp Leu Ser Ile Glu Gly Met Ser Ile 100 105 110

Ser Ala Asp Leu Lys Leu Gly Ser Asn Pro Thr Ser Gly Lys Pro Thr 115 120 125

Ile Thr Cys Ser Ser Cys Ser Ser His Ile Asn Ser Val His Val His 130 135 140

Ile S r Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
150
160

Ile Glu Ser Ala Leu Arg Asn Lys Met Asn Ser Gln Val Cys Glu Lys 165 170 175

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Val Thr Asn Ser Val Ser Ser Lys Leu Gln Pro Tyr Phe Gln Thr Leu Pro Val Met Thr Lys Ile Asp Ser Val Ala Gly Ile Asn Tyr Gly Leu Val Ala Pro Pro Ala Thr Thr Ala Glu Thr Leu Asp Val Gln Met Lys Gly Glu Phe Tyr Ser Glu Asn His His Asn Pro Pro Pro Phe Ala Pro 235 Pro Val Met Glu Phe Pro Ala Ala His Asp Arg Met Val Tyr Leu Gly Leu Ser Asp Tyr Phe Phe Asn Thr Ala Gly Leu Val Tyr Gln Glu Ala Gly Val Leu Lys Met Thr Leu Arg Asp Asp Met Ile Pro Lys Glu Ser Lys Phe Arg Leu Thr Thr Lys Phe Phe Gly Thr Phe Leu Pro Glu Val Ala Lys Lys Phe Pro Asn Met Lys Ile Gln Ile His Val Ser Ala Ser 315 Thr Pro Pro His Leu Ser Val Gln Pro Thr Gly Leu Thr Phe Tyr Pro 325 Ala Val Asp Val Gln Ala Phe Ala Val Leu Pro Asn Ser Ser Leu Ala Ser Leu Phe Leu Ile Gly Met His Thr Thr Gly Ser Met Glu Val Ser Ala Glu Ser Asn Arg Leu Val Gly Glu Leu Lys Leu Asp Arg Leu Leu Leu Glu Leu Lys His Ser Asn Ile Gly Pro Phe Pro Val Glu Leu Leu Gln Asp Ile Met Asn Tyr Ile Val Pro Ile Leu Val Leu Pro Arg Val Asn Glu Lys Leu Gln Lys Gly Phe Pro Leu Pro Thr Pro Ala Arg Val 425 Gln Leu Tyr Asn Val Val Leu Gln Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys